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IN

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/456,516	12/08/99	MULLER	K 732/000012

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KEIL & WEINKAUF
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WASHINGTON DC 20036

EXAMINER

TSOY, E

ART UNIT	PAPER NUMBER
1772	5

DATE MAILED: 08/24/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/456,516

Applicant(s)

MULLER ET AL.

Examiner

Elena Tsou

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 11 and 12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-12 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3, 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-10, drawn to a layered composite, classified in class 428, subclass 156.
 - II. Claims 11, 12, drawn to a process for producing a layered composite, classified in class 264, subclass 241.

Distinctness

The inventions are distinct, each from the other because:

2. Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by materially different process comprising adhesively bonding a decorative layer and a heat-cured layer to a backing layer without the use of mold.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
4. During a telephone conversation with Mr. Herbert B. Keil on August 14, 2001 a provisional election was made with traverse to prosecute the invention of Group, claims 1-10. Affirmation of this election must be made by applicant in replying to this Office action. Claims 11, 12 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

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5. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).
6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Specification

7. The following guidelines illustrate the preferred layout and content for patent applications. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

8. The following order or arrangement is preferred in framing the specification and, except for the reference to "Microfiche Appendix" and the drawings, each of the lettered items should appear in upper case, without underlining or bold type, as section headings. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) Title of the Invention.
- (b) Cross-References to Related Applications.
- (c) Statement Regarding Federally Sponsored Research or Development.
- (d) Reference to a "Microfiche Appendix" (see 37 CFR 1.96).
- (e) Background of the Invention.
 - 1. Field of the Invention.
 - 2. Description of the Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) Brief Summary of the Invention.
- (g) Brief Description of the Several Views of the Drawing(s).
- (h) Detailed Description of the Invention.
- (i) Claim or Claims (commencing on a separate sheet).
- (j) Abstract of the Disclosure (commencing on a separate sheet).

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- (k) Drawings.
- (l) Sequence Listing (see 37 CFR 1.821-1.825).

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. **Claims 1, 3-5, 8** are rejected under 35 U.S.C. 102(b) as being anticipated by Miyakoshi (US 5,827,788).

Miyakoshi discloses a layered composite with a decorative surface and comprising a backing layer 3 made from a thermoplastic polymer such as polystyrene copolymer, polybutylene terephthalate (See Fig. 3; column 4, lines 41-42, 49, 51), a decorative layer 2 arranged thereupon and a heat-cured layer 5 applied to the decorative layer 2 (See Fig.3; column 6, line 46; column 7, line 20; column 12, lines 18-31).

Regarding claim 3, an intermediate layer of an adhesive material is inserted between the backing layer 3 and the decorative layer 2. See column 10, lines 22-23.

Regarding claim 8, the decorative layer 2 is composed of a polymeric material which has a printed coloration. See column 4, lines 65-67; column 5, lines 1-7.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

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such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. **Claims 2, 10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyakoshi (US 5,827,788).

Miyakoshi, as been discussed in paragraph 10, fails to teach that:

a decorative layer and a heat-cured layer applied to the decorative layer are present on both sides of the backing layer (Claim 2);

the backing layer 16 makes up at least 80% of the total thickness (Claim 10).

In regards to claim 2, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make a decorative layer and a heat-cured layer applied to the decorative layer on each side of the backing layer, since it has have been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

In regards to claim 10, it would have been an obvious matter of design choice to make the form and its parts into any desirable size depending on the application of end product, since such a modification would have involved a mere change in the size. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

13. **Claims 6, 7** are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyakoshi (US 5,827,788) in view of Maeda et al (US 4,772,496).

Miyakoshi, as been discussed in paragraph 10, a decorative laminate as claimed but fails to teach that:

a backing layer is made from polyoxymethylene (Claim 6);

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a backing layer comprises 10-60 wt.% of reinforcing material such as barium sulfate, magnesium hydroxide, talc, wood, flax, chalk, glass fibers or glass beads (Claim 7).

However, Maeda teaches that polyoxymethylene is functionally equivalent to polystyrene or polybutylene terephthalate for making a backing layer of a decorative laminate. See column 8, line 5; column 10, line 44; column 15, lines 15, 36.

Maeda also teaches that a backing layer of a decorative laminate can be made from a reinforced thermoplastic material such as reinforced polystyrene, polybutylene terephthalate, and polyoxymethylene comprising up to 80 wt % of inorganic fillers such as magnesium hydroxide, talc, chalk, glass fibers or glass beads (See column 17, lines 56-68; column 18, lines 25, 40-41).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used polyoxymethylene for making a backing layer of a decorative laminate of Miyakoshi since Maeda teaches of the equivalence of polyoxymethylene and polystyrene or polybutylene terephthalate for their use in the decorative laminate art and selection of any of these materials to form a backing layer of a decorative laminate would be within the level of ordinary skill in the art. To substitute polystyrene or polybutylene terephthalate in Miyakoshi for polyoxymethylene of Maeda would have been an obvious functional equivalent.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have added up to 80 wt % of inorganic fillers such as magnesium hydroxide, talc, chalk, glass fibers or glass beads to a thermoplastic material of Miyakoshi in order to make a decorative laminate with a reinforced backing layer, as taught by Maeda.

14. **Claim 9** is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyakoshi (US 5,827,788) in view of Gleim (US 5,976,671).

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Miyakoshi, as been discussed in paragraph 10, further teaches that a layer 5 of a thermosetting polymeric material located next to the decorative layer 2 (See column 7, lines 19-20) heat-cured for 2 hours after production of a layered decorative composite (See column 12, lines 18-31).

Miyakoshi fails to teach that a heat-cured layer 5 composed of a thermosetting polymeric material is crosslinked by exposure to pressure or heat during the production of the layered decorative composite.

However, Gleim teaches that a layer 14 composed of a thermosetting polymeric material located next to a decorative layer 12 can be crosslinked by exposure to pressure and heat during the production of a decorative laminate. See column 4, lines 29-40.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have made a heat-cured layer of a decorative laminate of Miyakoshi composed of a thermosetting polymeric material of Gleim in order to cure the layer by exposure to pressure and heat simultaneously with the production of a decorative laminate, as taught by Gleim.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elena Tsoy whose telephone number is (703) 605-1171. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (703) 308-4251. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3599 for regular communications and (703) 872-9310 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

ET

Elena Tsoy
Examiner
Art Unit 1772

August 21, 2001


NASSER AHMAD
PRIMARY EXAMINER